

## ***CTE Standards Unpacking*** ***Digital Music Production***

**Course:** Digital Music Production

**Course Description:** The Digital Music Production course provides students with the basic knowledge and technical skills needed to prepare them for postsecondary study or entry-level employment in the Digital Music Production industry. Students will develop knowledge of the business of music, music copyright laws and ethics, studio recording, basic music theory needed to create music, and the creation and performance of electronic music.

**Career Cluster:** Arts, A/V Technology, Communications

**Prerequisites:** Recommendation only: Introduction to Arts, A/V Technology, and Communications Cluster class and basic music appreciation or musical experience

**Program of Study Application:** This is a secondary level pathway class in the Arts, A/V Technology and Communications Career Cluster, Telecommunications/A-V Technology and Film or Performing Arts pathway. It is preceded by the Introduction to Arts, A/V Technology, and Communications cluster class. It may be followed up with any pathway level 3 or 4 class or a Capstone Experience.

<b><i>INDICATOR #DMP 1: Discuss careers in digital music and audio production</i></b>		
<b><i>SUB-INDICATOR 1.1 (Webb Level: 1 Recall):</i></b> Identify opportunities and occupations in the field of digital music		
<b><i>SUB-INDICATOR 1.2 (Webb Level: 3 Strategic Thinking):</i></b> Demonstrate personal musical knowledge and interests		
<b><i>SUB-INDICATOR 1.3 (Webb Level: 3 Strategic Thinking):</i></b> Examine music copyright laws and ethics		
<b><i>SUB-INDICATOR 1.4 (Webb Level: 1 Recall):</i></b> Identify safety concerns and soft skills in the field of digital music		
<b>Knowledge (Factual):</b> -Impact of music on setting the mood in multimedia products.  -Multi-faceted career opportunities in music industry.  -Laws and ethics that govern digital music.  -Effective and appropriate interactions with collaborators and audience.	<b>Understand (Conceptual):</b> -Proper use of social media in this area (SoundCloud).  -Ethical and legal issues relating to digital music recording.  -Standard practice of situational awareness on stage or at a music venue (cord layout, where instruments are, edge of stage, other people).  -How to rate movies,	<b>Do (Application):</b> -Self-evaluate personal music knowledge and interests.  -Research audio and music production companies that supply music to the entertainment industry.  -Interview professional musicians who create music for broadcast. -Explore the requirements, skills,

<p>-Proper handling of equipment and instruments.</p> <p>-Dangers associated with handling electrical equipment.</p>	<p>television and films according to audio production.</p>	<p>wages, education, and geographic opportunities in audio and music technology.</p> <p>-Evaluate the importance of music and audio in entertainment.</p> <p>-Illustrate the effect of music production in movies (e.g., Jaws).</p> <p>-Demonstrate effective communication (written and verbal).</p>
<p><b>Benchmarks:</b> <i>Students will be assessed on their ability to:</i></p> <ul style="list-style-type: none"> <li>• Assess computer games for effectiveness of music and sound effects.</li> <li>• Identify and explain music technology in pre-recorded music beds and sound effects.</li> <li>• Generate a presentation of favorite genres with examples.</li> <li>• Create and properly utilize a SoundCloud account to share music for a specified purpose.</li> <li>• Collaboratively present on copywriting procedures for original compositions or productions.</li> </ul>		
<p><b><i>Academic Connections</i></b></p>		
<p><b>ELA Literacy and/or Math Standard (if applicable, Science and/or Social Studies Standard):</b></p> <p>W.7 Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.</p> <p>SL.1. Initiate and participate effectively in a range of collaborative discussions</p>	<p><b>Sample Performance Task Aligned to the Academic Standard(s):</b></p> <p>-Assessment of music and sound effectiveness</p> <p>-Copyright presentation</p>	

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<b>INDICATOR #DMP 2: Analyze digital audio production equipment &amp; software</b>		
<b>SUB-INDICATOR 2.1 (Webb Level: 4 Extended Thinking):</b> Examine the process of basic sound recording and capturing		
<b>SUB-INDICATOR 2.2 (Webb Level: 4 Extended Thinking):</b> Analyze recorded, live music, and computer generated music for technical and aesthetic quality		
<b>Knowledge (Factual):</b> -Analog and digital sound technology.  -Quality and care of equipment  -Sources for free and paid resources for sound effects, audio clips, speeches and music	<b>Understand (Conceptual):</b> -Process for converting live sound to usable recorded sound.  -How the recording process and equipment influence recorded files.  -Microphone and speaker location as it relates to sound quality.  -Difference between analog and digital sound quality.  -Evolution of digital audio.	<b>Do (Application):</b> -Listen and record sounds (e.g., Foley - recorded sound effects for movies) using available recording devices  -Draw examples of sound frequencies  -Compare recording equipment for sound quality.  -Listen to and evaluate "live" audio and compare it to studio recordings.  -Research and assess digital studios based on acoustics, microphone placement, and ceiling height. -Differentiate between analog and digital sound quality.
<b>Benchmarks:</b> <i>Students will be assessed on their ability to:</i> <ul style="list-style-type: none"> <li>Explore live concert venues and discuss speaker placement, microphone amounts, placement and area capacity and create a diagram.</li> </ul>		

- Classify major types of recording media as well as advantages and disadvantages of each.
- Critique real guitar or piano sound with a digitally created guitar or piano piece based on sound quality.

***Academic Connections***

**ELA Literacy and/or Math Standard (if applicable, Science and/or Social Studies Standard):**

W.4 – Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

SL.4 Present information, findings, and supporting evidence clearly, concisely, and logically such that listeners can follow the line of reasoning and the organization, development, substance, and style are appropriate to purpose, audience, and task.

**Sample Performance Task Aligned to the Academic Standard(s):**

-Write a reflection on historical development of sound recording devices, methods or usage.

-Sound quality critique

***INDICATOR #DMP 3: Create digital music***

***SUB-INDICATOR 3.1 (Webb Level: 4 Extended Thinking):*** Integrate basic music structure

***SUB-INDICATOR 3.2 (Webb Level: 2 Skill/Concept):*** Distinguish appropriate audio production software, equipment, and techniques

***SUB-INDICATOR 3.3 (Webb Level: 4 Extended Thinking):*** Generate audio (music, sound effects, vocal work) separately for use in musical piece

***SUB-INDICATOR 3.4 (Webb Level: 4 Extended Thinking):*** Construct layered digital music for publication or performance

**Knowledge (Factual):**

-Different rules governing composition.

-Basic audio and editing industry terminology.

-Various technology tools

**Understand (Conceptual):**

-General music rules (most commonly used techniques, what you should/should not consider doing when creating music)

-How expected audio

**Do (Application):**

-Explore basic music structure (form - AB/ABA; Intro/Verse/Chorus/Bridge/Outro)

-Identify tempo/beat,

<p>for creating music, sound effects and audio files.</p> <p>-Layering process</p> <p>-How to utilize tools and equipment to generate various audio file formats.</p>	<p>outcomes determine the technology tool(s) to be employed.</p> <p>-How to utilize layering processes.</p>	<p>meter, dynamics, melody, harmony, rhythm of music, chords, scales.</p> <p>-Practice writing music using basic notation (e.g., staff, clef, ledger lines, measures, time signature, notes, rests, key signature).</p> <p>-Transfer recorded sounds from recording device into appropriate audio production software (Free shareware or Licensed software).</p> <p>-Change volume levels for multiple audio tracks.</p> <p>-Use meters to identify overloading or clipping in playback of recorded material.</p> <p>-Apply audio effects to audio samples (panning, equalization, compression).</p> <p>-Construct tracks by "cutting and pasting" sections of recorded material.</p> <p>-Create music to express a specific mood of a visual art piece.</p> <p>-Compose music influenced by the genre and time periods of other</p>
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		<p>artistic mediums.</p> <p>-Apply electronic equalization effects to enhance individual music layers.</p>
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**Benchmarks:**

*Students will be assessed on their ability to:*

- Integrate two or more forms, write and compose music using basic music notation (e.g., staff, clef, ledger lines, measures, time signature, notes, rests, key signature).
- Compose guitar track to blend with digitally created musical instruments.
- Record audio to blend with digitally created musical instruments, live drum recordings or guitar track recordings.
- Record live drum beats to blend with digitally created musical instruments, recorded audio or guitar tracks.
- Create, present and defend music soundtracks for movie scenes.

***Academic Connections***

<b>ELA Literacy and/or Math Standard (if applicable, Science and/or Social Studies Standard):</b>	<b>Sample Performance Task Aligned to the Academic Standard(s):</b>
SL.2. Integrate multiple sources of information presented in diverse formats and media	-Defend use of sound tracks for movie scenes
SL.4 Present information, findings, and supporting evidence clearly, concisely, and logically such that listeners can follow the line of reasoning and the organization, development, substance, and style are appropriate to purpose, audience, and task.	-Present music sound tracks

**INDICATOR #DMP 4: Perform Digital Music**

**SUB-INDICATOR 4.1 (Webb Level: 3 Strategic Thinking):** Perform or demonstrate

personally created music in front of a live audience		
<b>SUB-INDICATOR 4.2 (Webb Level: 4 Extended Thinking):</b> Analyze and evaluate personally created music performances		
<b>SUB-INDICATOR 4.3 (Webb Level: 4 Extended Thinking):</b> Analyze the venue and audience for appropriate presentation of performance		
<b>Knowledge (Factual):</b> -Equipment placement on stage.  -Use of technology for performance.  -Types of venues.	<b>Understand (Conceptual):</b> -Difference between live performance and studio.  -How to plan for a live audience.  -Planning music selections for intended audience(s).  -Wiring connections to power equipment.  -Necessity of self-evaluation for performance improvements.	<b>Do (Application):</b> -Compose various musical pieces to present to audience.  -Listen, analyze, and critique student created music.  -Assess and discuss the layout of different venues.
<b>Benchmarks:</b> <i>Students will be assessed on their ability to:</i> <ul style="list-style-type: none"> <li>• Collaboratively create a "band" song project, presenting it for critique.</li> <li>• Create a model of a music venue, including stage, audience and equipment placement.</li> <li>• Design and present a visual layout or wiring schematic of the cabling needed to connect all of the equipment.</li> </ul>		
<b>Academic Connections</b>		
<b>ELA Literacy and/or Math Standard (if applicable, Science and/or Social Studies Standard):</b>  SL.1. Initiate and participate effectively in a range of collaborative discussions  SL.4 Present information, findings, and supporting evidence clearly, concisely, and logically such that listeners can follow the line of reasoning and the organization, development, substance,	<b>Sample Performance Task Aligned to the Academic Standard(s):</b>  -Discussion of "band" song project  -Layout of cabling equipment	

and style are appropriate to purpose, audience, and task.	
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### Additional Resources

Please list any resources (e.g., websites, teaching guides, etc.) that would help teachers as they plan to teach these new standards.

Websites include:

- Bassgorilla (tutorials) - <https://bassgorilla.com/>
- Digital Harbor High School Music Technology - <https://sites.google.com/site/dhhsmusictechnology/music-curriculum>
- Digital Music Association - <http://www.digmedia.org/issues-and-policy/copyright-and-royalties/139-copyright-in-music>
- Foley - [www.Marblehead.net/foley/jack.html](http://www.Marblehead.net/foley/jack.html)
- Health/Safety - <http://www.airsworld.com/blog/posts/2014/november/health-and-safety-in-the-music-events-industry/#.V2vjpVexqYU>
- John Muir Middle School Digital Music Program - [http://www.sjUSD.org/schools/john\\_muir/Pages/music/digital\\_music\\_program.html](http://www.sjUSD.org/schools/john_muir/Pages/music/digital_music_program.html)
- Music Genre Lists - <http://www.musicgenreslist.com/>
- Music Theory - <http://tobyrrush.com/theorypages/>
- Music.tutsplus.com
- Social Media for Teachers - <http://www.edutopia.org/blog/social-media-resources-educators-matt-davis>
- Soundcloud.com
- Teaching Copyright - <https://www.teachingcopyright.org/>
- US Copyright Office - <http://copyright.gov/policy/musiclicensingstudy/copyright-and-the-music-marketplace.pdf>

Online publications:

- DigitalMusicNews.com
- Pcmag.com

When looking for a Digital Audio Workstation (DAW), look for guides such as "The Ultimate Guide to DAW Software for 2015" ([www.ehomerecordingstudio.com/best-daw-software/](http://www.ehomerecordingstudio.com/best-daw-software/)).

Youtube is an excellent resource for all different types of tutorials.